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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,969	08/22/2003	Charles M. Harvey	QKL-001	8389

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EXAMINER

CHAMBERS, MICHAEL S

ART UNIT PAPER NUMBER

3711

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,969

Applicant(s)

HARVEY, CHARLES M.

Examiner

Mike Chambers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 has added the term "wherein at least one of the head frame and the stem is fabricated by injection molding". The term "at least one of the head frame and the stem is fabricated by injection molding" implies structure well beyond that disclosed in the applicants disclosure, which includes the claims as originally filed. This term is not supported and represents new matter.

Claims 2-15 inherit the deficiencies of claim 1

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feeney (5685791) in view of Lallemand (5333857) and Morrow (6066056). Feeney discloses the elements of claim 1 however it fails to clearly disclose a difference in material flexibility and an injection molded device. The injection molding is a product by process claim limitation and does not affect the structural limitations of the claim. Morrow discloses that the use of injection molding or other manufacturing means are equivalent forms of manufacture (3:1-5). Feeney fails to clearly disclose a stem with a greater rigidity than the head. Lallemand discloses that it is well known in the art to vary the reinforcement means in order to vary the material flexibility of the device (5:20-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed the device of Feeney with the material flexibility of Lallemand and the injection molding of Morrow in order to provide a more durable and sturdy device to increase user satisfaction.

As to claim 2 : Feeney discloses a mechanically joined unitary structure (fig 9). The sheath would be formed by the polymer once the mold was removed.

As to claim 3 : Feeney discloses a polymer (3:63-65)

As to claims 4 and 14 : Feeney discloses a composite material (4:1).

As to claim 5 : Feeney discloses an integrally continuous portion of a mechanical structure (fig 9).

As to claim 6 : Feeney discloses an integrally fabricated molding (fig 9, 5:12-16).

As to claim 7: Lallemand discloses varying the reinforcement material. The amount of reinforcing material used, is a matter of design choice and manufacturing

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method. The specification provides no unexpected results in using a reduced amount of reinforcing material. It would have been obvious to one of ordinary skill in the art to have selected an appropriate amount of reinforcing material in order to manufacture a lightweight and sturdy device to increase the satisfaction of the player.

As to claims 8 and 12 : Feeney discloses a combination of materials (2:10-13). The cross-sectional area of the stem (fig 9) would naturally have a higher rigidity due to the increased cross sectional area compared to the head.

As to claims 10 and 14: Feeney discloses a composite materials (5:12-16).

As to claim 11 : Feeney discloses a flexible plastic (3:63-64).

As to claim 13 : Feeney discloses an angled head frame (fig 2,3).

As to claim 15 : Feeney discloses a composite material (6:6-20).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feeney in view of Official Notice taken in the prior office action. Feeney discloses using a Teflon® mandrel (4:10). The use of various materials for a mandrel is well known in the art and Teflon is normally applied as a covering on a metal. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used metal to fabricate the mandrel in order to reduce manufacturing costs.

Also,

Claims 1-8 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feeney (5685791) in view of applicant's admitted prior art. Feeney discloses the elements of claim 1 however it fails to clearly disclose a difference in material flexibility and a stem with a greater rigidity than the head. Applicant's admitted prior art shows

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that the technique of varying the amount of reinforcing material is well known in the molding art (paragraph 26).

To provide greater stiffness to the stem 14 than the head frame 26, the composite material used to form the stem 14 can contain a greater concentration of fiber than the material used to form the head frame 26 (which may, particularly toward the distal end 23, lack fiber altogether), or can contain a reinforcing material providing reduced stiffness. Techniques for varying the composition of a polymer during the course of molding operations are well-understood in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed the admitted well known reinforcing techniques in the molding art with the device of Feeney in order to provide a more durable and sturdy device to increase user satisfaction.

As to claim 2 : Feeney discloses a mechanically joined unitary structure (fig 9). The sheath would be formed by the polymer once the mold was removed.

As to claim 3 : Feeney discloses a polymer (3:63-65)

As to claims 4 and 14 : Feeney discloses a composite material (4:1).

As to claim 5 : Feeney discloses an integrally continuous portion of a mechanical structure (fig 9).

As to claim 6 : Feeney discloses an integrally fabricated molding (fig 9, 5:12-16).

As to claim 7: See claim 1 rejection. Techniques for reinforcing the device is well known in the art.

As to claims 8 and 12 : Feeney discloses a combination of materials (2:10-13). The cross-sectional area of the stem (fig 9) would naturally have a higher rigidity due to the increased cross sectional area compared to the head.

As to claims 10 and 14: Feeney discloses a composite materials (5:12-16).

As to claim 11 : Feeney discloses a flexible plastic (3:63-64).

As to claim 13 : Feeney discloses an angled head frame (fig 2,3).

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Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feeney in view of Official Notice taken in the prior office action. Feeney discloses using a Teflon® mandrel (4:10). The use of various materials for a mandrel is well known in the art and Teflon is normally applied as a covering on a metal. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used metal to fabricate the mandrel in order to reduce manufacturing costs.

Response to Arguments

Applicant's arguments filed 8/18/05 have been fully considered but they are not persuasive. Although the applicant has amended the claim language to include certain soft terms such as "material flexibility" and yieldably flexible, there is nothing in the specification to clearly disclose what the terms mean. The claim language needs to have more structure in order to clearly define the invention and the meets and bonds of the instant invention.

The applicant has argued that the instant invention is different than the cited art. Unfortunately these differences have not been found in the specification, drawings or structure of the claim language. It is unclear to the examiner what the applicant believes the novelty of the instant invention is. Although the applicant goes into great detail to explain what the term material flexibility consists of, this information was not referenced

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or detailed in the specification, therefore it represents "new matter". The current claim language is very broad and merely calls for a sport device in which the "stem" has greater rigidity than the distal end of the head. Claiming that one paragraph [22] discloses the invention is not found persuasive. On one hand the applicant makes the argument that "techniques for varying the composition is well known in the art", while on the other hand the argument is made that varying the reinforcement material is "novel". Based on current claim language (Which the examiner believes contains "new matter" due to the addition of material flexibility"), the instant invention merely utilizes a well known method of molding a lacrosse stick. As noted in the prior office action, the current claim language reads on most lacrosse heads. The specification has more general information concerning the history of the lacrosse and the parts of a lacrosse head than clearly defining what the novelty of the invention is and its meets and bounds.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Chambers whose telephone number is 571-272-4407. The examiner can normally be reached on Mon-Fri 8:30-5:00.

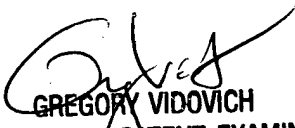
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

5685791*6066056*5333857*63352485*5746955

Michael Chambers
Examiner
Art Unit 3711

September 30, 2005


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